1-1. Introduction

This document outlines standards and procedures related to the minimal training requirements that developmental and certified professional controller (CPC) level controllers must meet to progress through being awarded VATSIM controller ratings. Furthermore with prescribed phraseology and other training related information.

This Job Order is effective and in full force and applicable upon all sub-division/ARTCCs within VATUSA as of 1 July 2019. Sections of this order may be modified via published Amendment Orders via forum post and/or documents on the VATUSA Website by VATUSA Director, Deputy Director, Training Director, and/or Deputy Training Director. No waivers to portions of this Job Order

Note: Appendices C-F are subject to change via separately published VATUSA Job Order 3120.25A, 3120.25B, 3120.25C, and 3120.25D respectively.

1-2. Training Program

The VATUSA Training Program is designed to take a developmental controller from an observer (OBS) rating to C1 (Controller or CPC) rating through self-study, interactive programs, simulated traffic scenarios, and monitored live network activities. Students are expected to review CBTs (Computer Based Training), various sections of FAA Order 7110.65, and come fully prepared for any training sessions.

1-3. Examinations

To ensure ratings are being issued in conjunction with the Training Standards listed in Section 2, sub-division facilities may utilize three types of exams. Written test which cover theoretical topics, oral questions which cover theoretical or limited practical subject matter, and OTS (Over-the-Shoulder) examinations which test students in either a simulated or live basis on practical applications. While not all domain areas listed in Section 2 need to be explicitly tested in either of these exam formats (Absent those outlined in any OTS Rubric (VATUA Order 3120-25.1, .2, .3, .4 and alphabetical revisions thereof)), sub-division facilities are required to have ensured the student has demonstrated the stated adequate level of competency. Sub-division facilities may make modifications to the 3120.25 .1, .2, .3, .4 (and alphabetic revisions) upon approval of the VATUSA Training Director (or designee thereof).

Written test prior to awarding a rating must be passed with a score of at least 80%. OTS for ratings must be passed with the criteria listed in the VATUSA Order 3120-25.1, .2, .3, .4 (and alphabetical revisions thereof). Exceptions to these requirements may be made in writing to the VATUSA Training Director (or designee thereof) via electronic mail. OTS criteria may contain areas that are graded Satisfactory/Unsatisfactory/Needs Improvement. Any mark of Unsatisfactory will result in the OTS being failed. Marks of Needs Improvement may be given for areas where a developmental meets the standard, but the Instructor deems the developmental needs more practice on to rise it to the level of Satisfactory. Major endorsement criteria must be spelled out in publicly available Major Rating Rubrics on facility/sub-division websites. Major endorsements are separate from VATSIM ratings. Written tests are **NOT** applicable to sub-division facilities awarding major certifications **after** a developmental/CPC has earned the particular rating required to earn that certification (i.e., S3 for a major approach).

1-4. Solo Certifications

Solo certifications for S2 controllers working a TRACON position and S3 students working an en-route position shall be noted on the VATUSA website. These solo certifications may not extend beyond thirty days in length absent a single extension of thirty days which must be approved by the sub-division Training Administrator or designee thereof. Facilities/sub-divisions may issue local solo certifications (i.e., S1 working a particular Major Tower, etc.) that can be tracked on their website, but must not be tracked on VATUSA.

1-5. Monitoring

Mentors/Instructors may not monitor a student/non-certified controller from a lower position (i.e., a mentor working ground cannot monitor a student/non-certified controller working tower or higher -- This is known as down-up monitoring). Nor can a mentor/instructor permit one holding an OBS (Observer) rating to transmit on their frequency.

A controller undergoing rating/certification training who does not hold a solo certification for the position must be monitored by a training staff member approved to monitor up to that position. The controller monitoring may only monitor one controller.

2-1. Training Standards

This section serves as VATUSA's decomposition and understanding of the competencies as outlined in Appendix A of the VATSIM Global Ratings Policy ("GRP"). VATUSA provides the basic materials for the basic ratings, facilities/sub-divisions may provide additional training materials for their major field(s) and specific minor field operation(s).

Training Standards are delineated by Domain Identification (DID). Each DID has a Domain (The basic concept being standardized); Base competency standard (Satisfactory) and inadequate competency (Unsatisfactory) standard (Textual descriptions of when the competency is met and not met), and a Commendable competency where the performance is above and beyond that required. The Prescribed Phraseology Table which matches the DID to the prescribed phraseology. Any area with one or more > are a sub-set of any area from which it depends. DIDs with a sub-domain (The second number) over 100 or greater are advanced topics that facilities do not need to train to, but a standard is provided if they so wish for circumstances they commonly see (military operations for instance).

2-2. Delivery/Ground Competencies

DID:	GRP:	CBT:	7110.65 Citation:	Domain:	Satisfactory:	Unsatisfactory:	Commendable:
1.0.0	II A 2	100.10	NONE	Introduction to VATSIM	NONE	NONE	NONE
1.1.0	II A 2	101.20	NONE	>Discussion of FAA 7110.65	NONE	NONE	NONE
1.2.0	II A 2	101.30	2-1-2 & 2-1-3	>Duty & Priority of ATC	Demonstrates understanding of ATC's roles in providing the safe and expeditious flow of traffic	Fails to demonstrate any level of understanding on ATC's roles in providing the safe and expeditious flow of traffic	NONE
1.3.0	II A 2	101.40	Chap 1	Introduction to ATC	NONE	NONE	NONE
1.3.1	II A 2	101.41	2-4-22	>National Airspace System	Identifies all airspace classes	Fails to identify all airspace classes	NONE
1.3.2.1	II A 2	101.43-44	2-4-22	>>Class G/E Airspace	Demonstrates knowledge of being at non-towered fields for E. Government Free airspace for G	Cannot identify either E or G knowledge.	NONE
1.3.2.2	II A 2	101.42	2-4-22	>>Class D Airspace	Demonstrates knowledge of class D being at towered fields.	Cannot identify class D airspace.	NONE

1.3.2.3	II A 2	101.46	2-4-22	>>Class C Airspace (including TRSA)	Identifies floor/ceiling of class C airspace and requirements to operate within.	Fails to identify the requirements to operate in Class C airspace or cannot identify floor/ceiling of class C airspace.	Identifies floor/ceiling for a Class C airspace in facility and requirements to operate within. Identifies Class C facility in home facility.
1.3.2.4	II A 2	101.45-46	2-4-22	>>Class B Airspace	Identifies floor/ceiling for a class B airspace and requirements to operate within. Shows how B and C differ.	Fails to identify floor/ceiling for a Class B airspace or does not state the requirements to operate within.	Identifies floor/ceiling for a Class B airspace in facility and requirements to operate within. Identifies how B and C differ.
1.3.2.4 a	II A 2	101.45	2-4-22	>>>Mode C Veil	Explains that Mode C must always be operated on VATSIM in the air. (ASDE-X compliance facility specific)	NONE	Lists when mode C must be operated on VATSIM. Explains Mode C veil.
1.3.3	II A 2	101.45	7-1-1	>>Class A Airspace	Identifies requirements to be in Class A airspace along with the floor and ceiling thereof	Does not identify requirements to be in Class A airspace or floor/ceiling	NONE
1.3.4.0	II A 2	101.47	2-4-22	>>Special Use Airspace	Identifies three types of SUAs.	Does not present knowledge of all three SUAs.	Defines the three types of SUAs and gives examples.
1.3.4.1	II A 2	101.47	2-4-22	>>>Warning Areas			
1.3.4.2	II A 2	101.47	2-4-22	>>>Restricted Areas			
1.3.4.3	II A 2	101.47	2-4-22	>>>Prohibited Areas			
1.4.0	II A 2	102.10	2-4-22	>Weather			

1.4.1.1	II A 2	102.20	2-6	>>METAR	Can fully decode a METAR including: Station identification, Time observation was made, Wind (including variable, gusts), Altimeter setting, Temperature & Dewpoint (and explains relationship), Identified cloud types and when a ceiling is present	Fails to decode METAR as required.	Can fully decode a METAR including: Station identification, Time observation was made, Wind (including variable, gusts), Altimeter setting, Temperature & Dewpoint (and explains relationship), Identified cloud types and when a ceiling is present. Can identify various visibility obscuring phenomena as outlined in the METAR.
1.4.1.2	II A 2	102.30	2-6	>>Terminal Aerodrome Forecast	Can fully decode a TAF including: Period of validity, When forecast was made, From period including forecasted conditions	Cannot fully decode a TAF.	NONE
1.4.1.3	II A 2	102.15	4-5-4	>>Lowest Usable Flight Level	Adequately lists the flight level that is useable at given altimeter settings	Cannot list flight level that is usable at a given altimeter setting	NONE
1.5.1.1	II A 5	103.10	2-4-8 & 3-1-13	>Radio Telephony	NONE	NONE	NONE
1.5.1.2	II A 5	103.50	2-4-8 & 3-1-13	>>Two-way radio communication	Properly establish and communicate two-way radio communication	Two-way radio communications do not meet prescribed phraseology	NONE

1.5.1.3	II A 5 & 6	103. 20	2-4-16	>>NATO Phonetic	Can pronounce letters in accordance with NATO phonetic alphabet	Fails to adequately show compliance with NATO phonetic alphabet	NONE
1.5.1.4	II A 5 & 6	103. 30	2-4-17	>>Number Groupings	Can pronounce zero to niner Properly groups numbers as appropriate	Fails to pronounce zero to niner or fails to properly group numbers	NONE
1.5.1.5	II A 5	103. 40	2-3-9	>>Special Callsigns	Can identify Branch of Service callsigns by designation/name for at least three services	Cannot identify at least three Branch of Service by callsigns/designations	Can identify Branch of Service callsigns by designation/name for all services
1.6	A1.1	100. 30	VATSIM	Setting up VRC	Can connect to VRC on an active position (sweatbox) and set up frequency and vox room/server	NONE	
2.0.0	II C 1	201. 10	2-5	Flight Data Theory	Can explain the parts of a flight plan	Cannot explain the parts of a flight plan	NONE
2.1.0	II C 1	201. 20	2-3-1	>Route of flight	Issues clearances using prescribed phraseology	Cannot issue clearances utilizing prescribed phraseology.	Issues abbreviated clearances and normal clearances using prescribed phraseology
2.1.1	II C 1	201. 30	4-5-2	>>Proper altitude for direction of flight	Identifies flight plan altitudes which do not correspond with NEODD/SWEVEN	Gives invalid altitude for direction of flight	NONE
2.1.2	II C 1	201. 40	2-1-28	>>Reduced Vertical	Identifies when RVSM begins explains how it differs	Cannot identify RVSM or define it.	NONE

				Separation Minima	from non-RVSM and properly amends non-compliant flight plans.		
2.1.3	II C 3	TBD	4-2-5	>>Amendments	Processes amendments to flight plan Identifies errors in flight plans and corrects them	Does not adequately process amendments	NONE
2.2.0	II A 4	201. 60	2-1-18	>Operational Requests	Complies with reasonable requests as workload permits	NONE	NONE
2.3.0	II A 7	201. 50	2-3-8	Equipment Suffix	Identifies, compares and contrasts at minimal the differences between VOR and aRea NAVigation Ensures flight plans are in compliance with restrictions regarding navigation type by identifying /A, /G and /L	Fails to identify at least /A, /G or /L equipment suffix.	Defines additional equipment suffix
2.4	II A 2	203. 10	Chap 7	VFR	Explains what VFR is	Cannot explain what VFR is	NONE
2.4.1	101. 42-43	203. 20	7-1	>Class E/D	Issues VFR code*	NONE	NONE

2.4.2	II A 2	203. 30	7-8	>Class C	Issues discrete beacon code	Does not issue discrete beacon code for IFR aircraft	NONE
2.4.3	II A 2	203. 40	7-9	>Class B	Issues VFR B clearance including discrete beacon code	Does not issue explicit class B clearance	NONE
2.4.4	II A 2	203. 30	2-1-21	>Flight Following	*Issues discrete code if requests flight following	Does not issue discrete beacon code when VFR flight following requested	NONE
2.5	II C 3	202. 30/1	3-9-1	Departure Procedures	Identifies four types of SIDs Defines pilot nav, radar nav and hybrid nav SIDs	Fails to identify and define pilot nav, radar nav, or pilot nav SIDs.	Defines and identifies all four types of SIDs and gives facility examples of each
2.5.1	II C 3	202. 40	3-9-1	>Pilot nav			
2.5.2	II C 3	202. 50	3-9-1	>Radar nav			
2.5.3	II C 3	202. 60	3-9-1	>Hybrid nav			
2.5.4	II C 3	202. 31	3-9-1	>ODP/Special Take-off minimums			
2.5.5	II C 3	202. 70	3-9-1	>Different crossing restriction than stated on DP	Issues clearance with a crossing restriction different than that on the DP	Does not use prescribed phraseology to issue a clearance with a different crossing restriction than on the DP	NONE

2.6	II C 3	202. 80-87	4-2-3	Clearance Issuance	Issues clearance using prescribed phraseology according to the SID (if any)	Does not utilize prescribed phraseology for issuance of the clearance	NONE
2.6.1	II C 3	202. 100	2-1-17	>Coordination	Coordinates flight plan changes with other facilities including proper usage of scratchpads	Does not coordinate when necessary	NONE
2.6.2	II C 3	202. 90	8-2-2	>Transfer of communication	Transfers communication using prescribed phraseology	Does not transfer control using prescribed phraseology or when necessary	NONE
2.7	II C 3	202. 100	2-1-18	Operational Requests	Ensures operational requests are understood and acknowledged	Does not understand or acknowledge operational requests	NONE
2.7.1	II B 1	202. 100	APP A(6)	>Position Briefing	Properly briefs relieving controller on necessary information	Position briefing controls errors or fails to give one	NONE
2.8	II A 5	202. 90	2-4-3	Ensure proper readback	Ensures readback is correct with prescribed phraseology Informs pilot of ATIS if they do not call in with it along with runway and altimeter setting as needed	Does not ensure proper readback or does not utilize prescribed phraseology	NONE

2.101	ADV		4-2-6	Through-clearance	NONE	NONE	Properly issues through clearance using prescribed phraseology
3.0	II A 2	204.20	3-7-2	Airport Layout	Defines movement and non-movement areas	Does not define movement/non-movement areas.	
3.0.1	II A 2	204.20	3-7-2	>Movement Areas	Gives example of a movement area	NONE	NONE
3.0.2	II A 2	204.20	3-7-2	>Non-movement areas	Gives example of a non-movement area	NONE	NONE
3.1.0	II A 2	204.30	3-7-2	Fixed-wing ground movement	Issues taxi instructions to an active runway utilizing prescribed phraseology	Does not issue taxi instructions with prescribed phraseology.	NONE
3.1.1	II A 2	204.31	3-7-2	>Taxi to runway			
3.1.1.1	II A 2	204.31	3-7-2	>>Hold short	Issues holding short instructions via prescribed phraseology	Does not give "hold short" instructions or does not use prescribed phraseology.	NONE
3.1.1.2	II A 2	204.34	3-7-2	>>Intersection departure	Issues taxi to a runway for an intersection departure using prescribed phraseology	Fails to utilize prescribed phraseology.	NONE
3.1.2	II A 2	204.36	3-7-2	>Taxi to gate	Issues taxi instructions to the gate via prescribed phraseology	Fails to use prescribed phraseology.	NONE
3.1.3	II A 2	204.37	3-7-2	>Progressive taxi	Issues progressive taxi in a professional manner utilizing prescribed phraseology	Cannot issue progressive taxi instructions, is not professional or does not utilize	NONE

						prescribed phraseology	
3.1.4	II A 2	204.34	3-7-2	>Coordinating crossings	NONE	Proper coordinates runway crossings including requests for such from tower	Does not utilize proper phraseology for coordination or fails to coordinate runway crossings as necessary
3.2.0	II D 1	204.40	3-11-1	Helicopter ground movement	Identifies and defines the three movement types	Cannot identify/define the three helo movement types.	Explains difference between hover and air taxi. Identifies and defines the three movement types for helos.
3.2.1	II D 1	204.40	3-11-1	>Surface taxi		NONE	NONE
3.2.2	II D 1	204.41	3-11-1	>Hover taxi		NONE	NONE
3.2.3	II D 1	204.42	3-11-1	>Air taxi		NONE	NONE
3.4.0	II D 1	204.50	3-7-2	Ground Sequencing	Sequences ground traffic	Cannot sequence ground traffic	NONE
3.4.1	II D 1	204.51	3-7-2	>Hold short	Issues hold short instructions when necessary using prescribed phraseology.	Issues hold short instructions when not necessary or uses improper phraseology.	NONE
3.4.2	II D 1	204.52	3-7-2	>Follow	Properly utilizes "follow" in a taxi instruction.	Fails to utilize prescribed "follow" phraseology.	NONE
3.4.3	II D 1	204.52	3-7-2	>Give way	Properly utilizes "give way" in a taxi instruction.	Fails to utilize prescribed "give way" phraseology.	NONE

3.5.0	II B I	204.60	3-1-4	Coordination (Including runway crossing and other necessary information)	Coordinates with other ATC positions using prescribed phraseology	Fails to coordinate or does not use prescribed phraseology.	
3.6.0	II A 3	204.60	3-7-2	Expeditious compliance	Utilizes "without delay" as needed	Improperly or fails to utilize expeditious language when necessary, or fails to utilize prescribed phraseology	NONE
3.7.0	II A 4	204.60	3-7-2 & 2-1-4	Abnormalities	Adequately modifies flow of traffic due to emergencies or other situations	NONE	NONE
3.8.0	II A 2	204.70	2-1-19	Aircraft categories and classes	Explains special significance of heavy/super	NONE	NONE

2-3. S2 Competencies

DID:	GRP:	CBT:	7110.65 Citation:	Domain:	Satisfactory:	Unsatisfactory:	Commendable:
4.0.0	II A 2	301.10	Chap 3	Introduction to Local Control	Can explain role of local controller	Cannot explain role of local controller	NONE
4.1.1	II E 1	301.20	3-1-3	Selection of Active Runway	Gives criteria for selection of active runway and identifies active runway currently in use	Does not identify current runway in use as per facility SOP nor can give criteria to select active runway	NONE
4.1.2	II E 2	301.30	3-9-3	ATIS Issuance & Content	Lists the portions of an ATIS	NONE	NONE
4.2.0	II E 8	302.10		VFR	Identifies all segments of the VFR traffic pattern	Does not identify all four segments of the VFR traffic pattern	NONE
4.2.1	II E 8	302.20	3-10-1	>Traffic Pattern			NONE
4.2.2	II E 8	302.21	3-10-1	>>Upwind			NONE
4.2.3	II E 8	302.22	3-10-1	>>Crosswind			NONE
4.2.4	II E 8	302.23	3-10-1	>>Downwind			NONE
4.2.5	II E 8	302.24-25	3-10-1	>>Base & Final			NONE

4.2.6	II E 8	302.40	3-10-1	>>Entry Instructions	Identifies and utilizes prescribed phraseology to issue entries into the pattern.	Fails to utilize prescribed phraseology to issue a traffic entry instruction.	NONE
4.2.7	II E 8	302.50	3-8-1	>>Sequencing	Identifies sequencing methodology	Does not identify all VFR sequencing methodology	NONE
4.2.7.1	II E 8	302.51	3-8-1	>>> S-Turns			NONE
4.2.7.2	II E 8	302.52	3-8-1	>>>270/360s			NONE
4.2.7.3	II E 8	302.53	3-8-1	>>>Follow			NONE
4.2.7.4	II E 8	302.54	3-8-1	>>>Visual Holding			NONE
4.2.8	II E 8	302.40	3-8-1	>>Transitioning	NONE	NONE	NONE
4.3.0	II E 8	302.61& 62	3-8-1	>Option	Defines each area in the option and uses prescribed phraseology to only approve parts of the option	Cannot list all areas of the option or does not use prescribed phraseology to limit approval	NONE
4.3.1	II E 8	302.63	3-8-1	>>Low approach			NONE
4.3.2	II E 8	302.64	3-8-1	>>Touch-and-go			NONE
4.3.3	II E 8	302.65	3-8-1	>>Stop-and-go			NONE

4.4.0	II E 8	302.70	3-8-1	>Flight-following	Ensures VFR aircraft are properly radar identified and informed of traffic	Does not provide traffic services to VFR aircraft properly	NONE
4.5.0	II E 4	302.30 & 303.20-21	3-8-1	Take-off Clearance	Issues take-off clearance with prescribed phraseology	Does not utilize prescribed phraseology in a take-off clearance	NONE
4.5.1	II E 4	303.22	3-9-4	>Line-up and Wait	Lists criteria for LUAW and utilizes prescribed phraseology (including informing pilot of reason for LUAW if reason is not immediately apparent)	Does not utilize prescribed phraseology for a LUAW, cannot list criteria for LUAW	NONE
4.5.2	II E 4	303.23	3-9-10	>Intersection Departure		NONE	NONE
4.5.3	II E 4	303.24	3-9-11	>Cancellation of Take-off Clearance	Uses prescribed phraseology to cancel a take-off	Does not use prescribed phraseology to cancel a take-off	NONE
4.5.4	II E 4	302.30	3-10-1	>Traffic Pattern Take-off	Uses prescribed phraseology and pattern direction	Does not use prescribed phraseology or incorrectly identifies	NONE

						traffic pattern direction for runway in use	
4.5.5	II E 4	303.60	3-11-2	Helicopter Operations	Uses prescribed phraseology for helicopter departures from non-runway areas Ensures adequate separation	Does not use prescribed phraseology for helicopter departures from non-runway areas or does not ensure adequate separation.	NONE
4.6.0	II E 5	302.60 & 303.30	3-10-1	Landing Clearance	Issues landing clearance (including advisories) using prescribed phraseology	Does not use prescribed phraseology for landing clearance	NONE
4.6.1	II E 5	303.30	3-10-7	>Crossing Runways	(Part of landing clearance)	NONE	NONE
4.6.2	II E 5	303.31	3-10-4	>LAHSO	Defines land and hold short operations and utilizes prescribed phraseology to issue one	Cannot identify when LAHSO is present, cannot define it, or does not use prescribed phraseology	NONE
4.6.3	II E 3	303.32	3-8-1	>Go-Arounds	Issues go-around only when necessary using prescribed phraseology	Issues a go-around when not necessary or does not use prescribed phraseology	NONE

4.6.4	II E 5	303.33	4-8-7	>Change runway	Uses prescribed phraseology	Does not utilize prescribed phraseology	NONE
4.6.5	II E 5	303.34	4-8-6	>Circle-to-land	Uses prescribed phraseology	Does not utilize prescribed phraseology	NONE
4.7.0	II E 6	303.40	3-9-6	Same runway Separation	Demonstrates basic understanding of same runway separation	Does not demonstrate basic understanding of same runway separation requirements	Outlines separation between small, medium, large and heavy along with class I-III aircraft
4.8.0	II E 6	303.50	3-9-8	Wake Turbulence Separation	Defines when wake turbulence is applicable	Does not define when wake turbulence is applicable	NONE
4.9.0	II E 9	TBD	2-1-15 & 2-1-17	Transfer of control	Transfer aircraft in an expeditious manner to the proper departure controller	Does not issue aircraft to proper departure controller or does not do it in an expeditious manner	NONE
4.9.1	II E 9	TBD	2-1-15	>Issues rolling calls to departure	Issues rolling calls as necessary	NONE	NONE
4.100.1	III E 5	TBD	4-10-12	Overhead Maneuver	NONE	NONE	Utilizes prescribed phraseology for the overhead maneuver

2-4. S3 Competencies

DID:	GRP:	CBT:	7110.65 Citation:	Domain:	Satisfactory:	Unsatisfactory:	Commendable:
5.0.0	III B 1	TBD	Chap 5	Introduction to Radar Control/TRACON	Demonstrates knowledge of radar control	Does not demonstrate knowledge of radar control	NONE
5.0.1	III B I	TBD	Chap 5	>SID/STAR/approach symbology	Explains the symbology and meaning on departures, arrival, and approach charts/plates	Cannot define a majority of symbols on a departure, arrival, or approach chart/plate and their meaning	NONE
5.1.0	II A 2	TBD	2-1-17	Coordination	Utilizes coordination as necessary	Does not utilize coordination as necessary	NONE
5.1.1	III B 1	TBD	5-4-5	>Hand-offs	Hands off traffic before entering another controller's airspace	Fails to hand off traffic before entering another controller's airspace	NONE
5.1.1.1	III B 1	TBD	5-4-5	>>Automated	NONE	NONE	NONE
5.1.1.2	III B 1	TBD	5-4-5	>>Manual	NONE	NONE	Issues manual hand-offs
5.1.2	III B 1	TBD	5-4-7	>Point-outs	Utilizes prescribed phraseology for a point-out	Does not use prescribed phraseology for a point-out or fails to use one when necessary	NONE

5.1.3	III B 1	TBD	5-4-10	>Pre-arranged coordination	Demonstrates understanding of pre-arranged coordination	Fails to demonstrate adequate knowledge of pre-arranged coordination	NONE
5.1.4	III B 1	TBD	2-4-12	>APREQ	Receives approval requests for changes to aircraft heading/direct or altitude using prescribed phraseology	Fails to use APREQ correctly	NONE
5.2.0	III B 1	TBD	4-3-3	Amendments	Amends flight plan properly for changes in altitude and flight plan route	Fails to properly amend flight plan properly for changes in altitude or routing	NONE
5.3.0	III G 1 & 5	TBD	4-3-4	Uncontrolled field operations	Can explain one-in/one-out rule	Cannot explain the one-in/one-out rule	NONE
5.3.1	III G 1 & 5	TBD	4-2-8	>Pop-up IFR & Flight Following	Properly clears pop-up IFR traffic using prescribed phraseology Establishes aircraft on flight following using prescribed phraseology	Does not properly clear pop-up IFR aircraft or establish flight following services using prescribed phraseology	NONE
5.3.2	III G 1	TBD	4-3-4	>Release	Issues a clearance followed by a proper release request or hold for release using prescribed phraseology.	Does not use prescribed phraseology in a release.	NONE

5.3.3	III G 3	TBD	4-3-4	>One in/One out	Ensures one IFR aircraft is inbound/outbound for an airport	Fails to properly apply one in/one out	NONE
5.3.4	III D 1	TBD	4-3-4	>Handling arrivals	Ensures arriving IFR aircraft are informed of any traffic in vicinity using prescribed phraseology	Fails to inform aircraft of presence of other aircraft in the vicinity	NONE
5.3.5	III D 7	TBD	5-4-3	>Transfer (including manual handoffs to other controllers)	Transfers aircraft to other facility using prescribed phraseology and initiates the radar hand-off in a timely fashion. Ensures aircraft do not impermissibly bust another controller's airspace	Impermissibly busts another controller's airspace or does not utilize prescribed phraseology for a hand-off	NONE
5.4.0	III C I	TBD	5-3-2 & 5-3-3	Radar Identification	Identifies all identification primary and secondary identification techniques	Fails to identify all primary and secondary identification techniques	NONE
5.4.1	III C I	TBD	5-3-3	>IDENT			NONE
5.4.2	III C I	TBD	5-3-3	>Change squawk code			NONE
5.4.3	III C I	TBD	5-3-3	>Squawk standby/normal			NONE
5.4.4	III C I	TBD	5-3-2	>Right/left for radar identification			NONE

5.4.5	III C I	TBD	5-3-2	>Position reports	Radar identifies aircraft when controller can ascertain where aircraft is via position report	Issues beacon code or other radar identification means when the aircraft's position is given and the controller can easily ascertain the aircraft's location	NONE
5.4.6	III C 1	TBD	5-10-5	>Radar contact lost	Uses prescribed phraseology to inform an aircraft of loss of radar contact	Does not utilize prescribed phraseology or improperly informs aircraft of loss of radar contact	NONE
5.4.7	III C I	TBD	5-3-2	>Rolling calls	Explains what a rolling call is and gives an example	Cannot explain what a rolling call is or cannot give an example	NONE
5.4.8	III C I	TBD	5-3-6	>Position confirmation	Confirms pilot location using prescribed phraseology	Does not use prescribed phraseology or improperly given pilot location	NONE
5.5.0	III E I	TBD	5-2-17	Verify Mode C altitude	Verifies mode C altitude when aircraft enters from another facility	Does not verify mode C altitude	NONE
5.6.0	III C I	TBD	5-1-13	Radar Termination	Terminates radar services using prescribed phraseology when necessary	Does not utilize prescribed phraseology or cancels radar services improperly	NONE

5.7.0	III F 1 & 2	TBD	5-1 & 5-5	Separation	Identifies vertical and horizonal separation in airspace classes	Does not identify the vertical and horizontal separation in airspace classes	NONE
5.7.1	III F 1 & 2	TBD	5-1-8 & 5-5-2	>Merging targets	Demonstrates understanding of merging targets	Does not demonstrate understanding of merging targets	NONE
5.7.2	III F 1 & 2	TBD	2-1-21	>Traffic calls and alerts	Issues traffic calls and alerts using prescribed phraseology	Does not utilize prescribed phraseology in issuing a traffic call or alert.	NONE
5.7.3	III F 1 & 2	TBD	2-1-21	>Visual	Applies visual separation and does not use it to absolve controller of positive separation requirements	Does not utilize visual separation properly	NONE
5.7.4	III F 1 & 2	TBD	5-5	>Positive	Demonstrates knowledge of positive separation	Does not demonstrate knowledge of positive separation	NONE
5.7.5	III F 1 & 2	TBD	5-5-4	>Wake turbulence	Applies wake turbulence minima in the approach airspace	Does not apply wake turbulence minima in the approach airspace	NONE
5.8.0	III G 1	TBD	2-7-2	Altimeter Issuance	Issue altimeter when aircraft will be descending below the lowest usable flight level or when below such every fifty flying miles identifying source of altimeter	Fails to notify aircraft of altimeter setting when necessary	NONE

5.9.0	III C 3	TBD	5-8-1	Climb-out	Issues climbing instructions utilizing prescribed phraseology as appropriate	Does not appropriately or does not properly utilize prescribed phraseology for a departing aircraft	NONE
5.10.0	III D 3	TBD	4-5-7	STAR	Utilizes prescribed phraseology for STARs including ATIS/altimeter issuance when necessary	Does not use prescribed phraseology for STARs	NONE
5.10.1	III D 3	TBD	4-5-7	>Crossing restrictions			NONE
5.10.2	III D 3	TBD	4-5-7	>Descend via			NONE
5.10.3	III D 2	TBD	4-5-7	>Vectoring off	When needed issues hard altitude for aircraft being vectored off of a STAR		NONE
5.11.0	III E 2	TBD	5-6-1	Vectoring	Gives reason for vector	Does not use prescribed phraseology.	NONE
5.11.1	III E 2	TBD	2-1-6	>Low altitude alert	NONE	NONE	NONE
5.11.2	III E 2	TBD	5-6-1	>Minimal Vectoring Altitude	Defines and follows the MVA	Does not define or follow MVA	NONE
5.12	III E 1	TBD	5-7 & 5-9	Sequencing and spacing	Efficiently sequences and separates aircraft	Separation of aircraft is not proper or efficient	NONE
5.12.1	III E 5	TBD	5-7-1 to 5-7-3	>Speed adjustment	Utilizes proper speed phraseology as required in the sub-domains	Does not utilize prescribed phraseology for speed adjustments	NONE

5.12.1.1	III E 5	TBD	5-7-2	>>Speed limits	States prescribed limits for speed in reference to airport/aircraft type IOW 7110.65 5-7-3	Does not comply with standard	NONE
5.12.1.2	III E 5	TBD	5-7-2	>>Speed adjustment	Uses prescribed phraseology to issue a speed adjustment		NONE
5.12.1.3	III E 5	TBD	5-7-2	>>>Increase speed			NONE
5.12.1.4	III E 5	TBD	5-7-2	>>>Maintain speed			NONE
5.12.4.1.5	III E 5	TBD	5-7-2	>>>Decrease speed			NONE
5.12.2	III E 5	TBD	5-7-4	>>Terminal of speed restriction	Utilizes prescribed phraseology to terminate speed restrictions	Does not utilize prescribed phraseology to terminate a speed restriction	NONE
5.12.3	III E 5	TBD	5-7-2	>>Mach transition	States where the Mach transition is and issues utilizing prescribed phraseology transition speeds	Does not utilize prescribed phraseology or cannot identify where the Mach transition is	NONE
5.12.4	III E 5	TBD	5-7-2	>Altitude + Speed adjustment	Issues one of altitude or speed adjustment to do first then which to do second	Issues speed/altitude adjustment at once	NONE
5.13	III D 6	TBD	4-8-1	Approaches	Defines precision vs. non-precision approach	Cannot define the difference between precision and non-precision approach	NONE
5.13.1	III D 6	TBD	4-8-1	>Visual	NONE	NONE	NONE
5.13.2	III D 6	TBD	4-8-1	>Instrument/Charted	NONE	NONE	NONE

5.13.2.1	III D 6	TBD	4-8-1	>>Precision	NONE	NONE	NONE
5.13.2.1.1	III D 6	TBD	4-8-1	>>>ILS/GLS	Gives approach clearance utilizing prescribed phraseology	Phraseology error in giving approach clearance	NONE
5.13.3	III D 6	TBD	4-8-1	>>Non-precision	Covered by 5.13.3.1-.4	Covered by 5.13.3.1-.4	NONE
5.13.3.1	III D 6	TBD	4-8-1	>>>VOR/DME	Gives approach clearance utilizing prescribed phraseology	Phraseology error in giving approach clearance	NONE
5.13.3.2	III D 6	TBD	4-8-1	>>>LOC/LDA	Gives approach clearance utilizing prescribed phraseology	Phraseology error in giving approach clearance	NONE
5.13.3.3	III D 6	TBD	4-8-1	>>>NDB	Gives approach clearance utilizing prescribed phraseology	Phraseology error in giving approach clearance	NONE
5.13.3.4	III D 6	TBD	4-8-1	>>>RNAV (RNP/GPS)	Gives approach clearance utilizing prescribed phraseology	Phraseology error in giving approach clearance	NONE
5.13.3.5	III D 6	TBD	4-8-1	>>>Charted Visual	Gives approach clearance utilizing prescribed phraseology	Phraseology error in giving approach clearance	NONE
5.13.4	III D 6	TBD	4-8-1	>Cancel	Cancels approach clearance using prescribed phraseology	Does not utilize prescribed phraseology to cancel an approach clearance	NONE
5.13.5	III D 6	TBD	4-8-7	>Side Step	Issues side-step maneuver clearances when necessary and utilizes prescribed phraseology	Does not issue side-step maneuver clearances when necessary or utilizes improper phraseology	NONE

5.13.6	III D 7	TBD	5-9-4	>Transfer to tower	Hands aircraft off to tower in an adequate time/distance from airport	Transfers (or fails to at all transfer) aircraft in an inadequate time/distance from airport	NONE
5.14	III G 2	TBD	3-8-1	Sequencing	Sequences aircraft in a manner that maintains positive separation.	Fails to maintain positive separation while sequencing aircraft	Sequences aircraft in a manner that is expeditious maintains positive separation.
5.14.1	III G 2	TBD	4-8-11	>Practice Approach	Uses prescribed phraseology for practice approaches	Does not utilize prescribed phraseology for practice approaches	NONE
5.15	III G 4	TBD	4-6-1	Holds	Discusses difference between published and non-published holds	Cannot explain difference between published and non-published holds	NONE
5.15.1	III G 4	TBD	4-6-4	>Instructions	Uses prescribed phraseology for issuing holding instructions	Does not issue holding instructions using prescribed phraseology	NONE
5.14.2	III G 4	TBD	4-6-2	>Cancel	Clears aircraft after a hold and uses prescribed phraseology	Does not cancel a hold or does not use prescribed phraseology to do so	NONE

2-5. C1 Competencies

D I D :	GRP:	CBT:	7110.65 Citation:	Domain:	Satisfactory:	Unsatisfactory:	Commendable:
6.0.0	IV A 2	500. 10	Chapter 5	Introduction to En-Route	Demonstrates knowledge of the en-route environment	(Tested elsewhere)	NONE
6.1.0	IV B 1	500. 20	2-1-17	Coordination	Coordinates with other facilities	(Tested elsewhere)	NONE
6.2.0	IV C-E	500. 30	5-5-4	En-route Separation	Ensures en-route separation is maintained	NONE	NONE
6.3.0	IV C 1	500. 40	4-5-7	Altitude Changes	Issues descents as necessary utilizing prescribed phraseology	Does not maintain adequate en-route separation	NONE
6.3.1	IV C 1	500. 41	4-5-7	>Crossing Restrictions	Issues descent instructions to cross/meet an altitude as necessary using prescribed phraseology	Issues descents not using prescribed phraseology or when not necessary	NONE
6.3.2	IV E 5	500. 42		>Basic Descent Math	Issues descents to an aircraft when necessary to ensure the aircraft should in an ideal environment meet the initial crossing restriction assigned	Issues descents not using prescribed phraseology or when not necessary	NONE
6.4.0	IV D 6	500. 50-51	7-3-1	VFR-on-Top and Flight Following	Issues VFR on-top utilizing prescribed phraseology. Provides	Issues crossing restriction too early or too late to ensure an aircraft in an ideal	NONE

					flight following services when able.	situation can meet the crossing restriction	
6.5.0	IV E 1	505. 60	2-6-2	Hazard Weather Issuance	Issues hazardous weather information using prescribed phraseology and provides necessary deviation assistance	Does not issue hazardous weather information using prescribed phraseology or fails to properly provide deviation assistance	NONE
6.6.0	IV D 1	500. 30	P-2	Positive Control	Ensures positive control is maintained	NONE	NONE
6.7.0	IV D 1	500. 31	2-1-21	Crossing traffic	Utilizes prescribed phraseology to alert crossing traffic of each other	Does not maintain positive separation	NONE
6.8.0	IV B 1 & E 4	500. 30	2-1-15	Transfers	Uses prescribed phraseology for transferring control responsibility	Does not utilize prescribed phraseology for transferring control responsibility or transfers it improperly or otherwise in error	NONE
6.9	IV D 4	500. 70	Chap 6	Non-Radar	Demonstrates basic knowledge of time-based non-radar separation	Does not emonstrate basic knowledge of time-based non-radar separation.	Provides non-radar services utilizing separation and PIREPs
6.102	ADV	TBD	Chap 8	Oceanic		NONE	Provides oceanic services ensuring adequate separation
6.103	ADV	TBD	2-1-11	Military	NONE	NONE	Outlined in sub-domain

6.103.1	ADV	TBD	9-2-14	>In-air re-fueling	NONE	NONE	Issues in air re-fueling utilizing prescribed phraseology
6.103.2	ADV	TBD	2-1-11	>MARSA	NONE	NONE	Properly ensures MARSA is in effect
6.103.3	ADV	TBD	4-5-7	>Cruise Clearance	NONE	NONE	Issues cruise clearance utilizing prescribed phraseology

3-1. Phraseology Guide

This Phraseology Guide sets forth the prescribed phraseology that is expected to be utilized in all radio communications, adapted for any "VATSIMisms" as necessary. Slight variations in the phraseology are permissible, such as those dictated by local Standard Operating Procedures. Each phraseology area includes a corresponding example.

3-2. Delivery Phraseology

Area	Phraseology	DID supported:
Clearance on request	(Callsign), clearance on request, (number in sequence), standby. "American Fife Two, Clearance on request, number two, standby."	2.1.0
IFR clearance as filed	(Callsign), cleared to (clearance limit: airport, navaid, or fix including identification of type), as filed. Maintain (altitude). Squawk (beacon code). Departure frequency (frequency). "November two two fife delta mike, cleared to University Park Airport as filed. Maintain 2,000. Departure frequency one one niner point tree fife. Squawk two four tree six."	2.1.0, 2.6.1
IFR clearance with amendment of route	(Callsign), cleared to (clearance limit: airport, navaid, or fix including identification of type), via (portion of amended routing up to point of change) then as filed. Maintain (altitude). Squawk (beacon code). Departure frequency (frequency). "United Seventeen Forty-four, cleared to Washington-Dulles International Airport via radar vectors Montour (Mike-Mike-Juliet) then as filed. Squawk two four tree six. Departure frequency one one niner point tree fife."	2.1.3, 2.6.1
IFR clearance via radar vector SID	(Callsign), cleared to (clearance limit: airport, navaid, or fix including identification of type) via (departure procedure), radar vectors (fix) then as filed. Maintain (altitude). Squawk (beacon code). Departure frequency (frequency). "All Nippon One Heavy is cleared to Tokyo-Narita Airport, capital one departure radar vectors JERES then as filed. Maintain 3,000. Departure frequency one two six point fife. Squawk tree one fife six.	2.5.1.2, 2.6.1
IFR clearance via pilot nav or hybrid nav SID	(Callsign), cleared to (clearance limit: airport, navaid, or fix including identification of type), (departure procedure), (transition fix) transition then as filed. Maintain (altitude). Squawk (beacon code). Departure frequency (frequency). "All Nippon One Heavy is cleared to Tokyo-Narita Airport, capital one departure radar vectors JERES2 departure, JERES transition then as filed. Maintain 3,000. Departure frequency one two six point fife. Squawk tree one fife six.	2.5.1.1, 2.6.1

Climb via the SID (including crossing at a different altitude than published)	(Callsign), cleared to (clearance limit: airport, navaid, or fix including identification of type), (proper route clearance) then as filed. Climb via the SID (except maintain as necessary). Squawk (beacon code). Departure frequency (frequency). "Southwest Fife Ten, cleared to the Chicago-Midway Airport, TERPZ6 departure, JERES transition then as filed. Climb via the SID [Except cross JERES at one four thousand as an example of a different crossing altitude]. Departure frequency one two eight point seven. Squawk one six two fife".	2.5.1.5, 2.6.1
VFR Clearance (Bravo airspace)	(Callsign), is cleared into/out of/through the (airspace). Maintain VFR (including any necessary; at, at or below, at or above; altitude). Departure frequency (frequency). Squawk (discrete code). "Helicopter Two Fife Six Hotel is cleared out of the Washington Bravo Airspace. Maintain VFR at or below two thousand fife hundred. Departure frequency one one niner point one. Squawk six two two four.	2.4.4, 2.6.1
VFR Clearance (Charlie airspace)	(Callsign), departure frequency (frequency). Squawk (discrete code). "Cessna Eight One Two Two Sierra, departure frequency one two zero point four. Squawk six two two zero."	2.4.3, 2.6.1
VFR Clearance (flight following)	(Callsign), squawk (discrete code), maintain VFR	2.4.5, 2.6.1
Ensuring readback	(Callsign), readback correct." "Skyhawk Six Two Two Sierra, readback correct."	2.6.1
Contact position	Contact (position) (frequency) "Contact Washington Tower, one one niner point one"	2.6.1.2
Monitor position	Monitor (position (frequency) "Monitor Washington Tower, one one niner point one"	2.6.1.2

3-3. Ground Phraseology

Area	Phraseology	DID supported:
Taxi instructions (fixed wing/non-hover/air, runway)	Runway (runway designation, include intersection as necessary with feet remaining) taxi via (taxi route. Including any hold short instructions (limit one hold short) include phraseology as needed for sequencing in following areas) "Runway tree zero, taxi via zulu yankee eleven" "Runway tree tree left, taxi via papa echo hold short runway two eight"	3.1.0

	"Runway two eight right, taxi via echo, give way to the Delta seven fife seven taxing left to right on echo" "Runway two eight right, taxi via echo, hold short of echo three for traffic" "Runway two eight right at echo tree, eight thousand feet remaining, taxi via echo echo tree"	
Taxi instructions (to non-runway location)	Taxi/continue taxi (location) (taxi route) "Taxi to the ramp via echo"	3.1.2
Taxi instructions (hover)	Hover taxi to (location, can be a runway. Include any hold short instructions (limit one hold short) include phraseology as needed for sequencing) "Hover taxi to runway tree zero via zulu yankee eleven"	3.2.2
Taxi instructions (air taxi)	Air taxi (direct or via taxi route) to (location) (Include altitude via REMAIN AT OR BELOW; include areas to avoid or traffic to be cautious of via AVOID/CAUTION (information as necessary)) "Air taxi to runway tree zero via direct" "Air taxi to runway tree zero via zulu yankee eleven remain at or below fifty feet caution the United airbus exiting runway one center"	3.2.3
Hold position	Hold position	3.4.0
Continue taxi	Continue taxi (via route as necessary) "Continue taxi to runway tree zero via yankee eleven" "Continue taxi, cross runway two eight at echo eleven"	3.4.0

3-4. Local Phraseology

Area	Phraseology	DID supported:
Helicopter on non-movement area requesting take-off	Departure from (location) will be at your own risk (additional instructions as necessary) (If necessary: USE CAUTION (include cautionary statement)) "Departure from the ramp will be at your own risk."	4.5.5
Takeoff clearance (IFR)	Runway (runway designation, intersection as needed, including necessary information) cleared for takeoff "Runway tree zero, cleared for takeoff"	4.5.1, 4.5.2

	"Runway tree zero, wind one zero zero at tree, cleared for takeoff" "Runway tree zero, caution wake turbulence departing heavy seven four seven, cleared for takeoff" "Runway two eight center, traffic landing the parallel runway, cleared for takeoff" "Runway two eight center at papa, cleared for takeoff"	
Takeoff clearance (VFR) **Gust reported:**	Runway (runway designation, intersection as needed. Relevant traffic information as needed), (make right/left closed traffic, depart straight out, depart right/left base/cross/downwind) cleared for take-off "Runway one right, make right closed traffic, cleared for takeoff" "Runway one right, follow the red Cessna on a right downwind, make right closed traffic, cleared for takeoff" . . . wind (speed) gusts (gust factor) . . . ". . . wind tree zero zero at one two gusts one six . . ."	4.5.4, 4.2.0-4.2.2.8
Landing clearance (VFR)	Runway (runway designation) (any necessary information) cleared (for the option (include any aspects not available) or make low approach or make touch-and-go or stop-and-go or to land) "Runway one right, cleared to land" "Runway one right, wind one zero zero at six, cleared to land" "Runway six, cleared for the option, unable stop-and-go all other options approved" "Runway six, cleared touch-and-go" "Runway one niner, traffic landing runway one fife, cleared to land"	4.6.1, 4.3.0-4.3.3
Cancel takeoff clearance	Cancel takeoff clearance "Skyhawk two two mike, cancel takeoff clearance"	4.5.3
Landing clearance (IFR)	Runway (runway designation) (any necessary information) cleared to land "Runway one center, wind two zero zero at fife, cleared to land" "Runway one right, traffic landing runway one center, cleared to land" "Runway one right, caution wake turbulence, six miles in trail of a heavy seven six seven, cleared to land"	4.6.0, 4.6.1, 4.8.0
Land and hold short	Runway (runway designation) hold short of (runway designation) (any necessary information) "Runway eight hold short of runway tree six, traffic in position on runway tree six, wind calm, cleared to land"	4.6.2
Change landing runway	Change to runway (runway designation), (any necessary information) cleared to land "Change to runway one right, cleared to land"	4.6.4

Circle to land	Circle to runway (runway designation) (any necessary information), cleared to land “Circle to runway one, cleared to land” “Circle north to runway six, cleared to land” Circle (N/NE/E/SE/S/SW/W/NW) of the airport/runway for a left/right/base/downind to runway (runway) “Circle north east of the runway for a right base to runway six”	4.6.5
Go-around	Go-around (information as needed “Skyhawk two mike mike, go-around, fly heading two eight zero”	4.6.3
VFR sequencing	Hold over (visual point) “Hold over the water tower” Make left three sixty/two seventy “Make left three sixty” Make (number and direction) s-turns “Make one left s-turn” Follow (aircraft) “Follow the red Skyhawk” Extend (segment) “Extend downwind, tower will call your base”	4.2.7
Line-up and wait	Runway (runway designation), line-up and wait (include information if not immediately clear to pilot the reason for LUAW) “Runway one niner, line-up and wait traffic crossing downfield”	4.5.1
Continue	Runway (runway), continue (advisory information) “Runway six, continue, traffic holding in position”.	4.5.1 & 4.6.0

3-5. TRACON & En-Route Phraseology

Area	**Phraseology**	**DID supported:**
IDENT	(Callsign), ident. “Southwest four ten, ident.” Squawk (beacon code) and ident.	5.4.1

	"Southwest four ten, squawk two tree one fife and ident."	
Radar contact requiring code change or new code	(Callsign), squawk (beacon code). "November two six tree tree Golf, squawk six two fife one."	5.4.2
Radar identification through mode change	Squawk standby. -then- Squawk normal.	5.4.3
Radar identifying turns for radar identification	Turn (direction) (degrees) for radar identification "Turn right thirty degrees for radar identification"	5.4.4
Radar contact (including position report)	(Callsign) radar contact (position if required). "Southwest four ten, radar contact, position as reported." "Southwest four ten, radar contact, eight miles north of the Tuba City VOR."	5.4.5
Radar contact lost	(Callsign) radar contact lost "Southwest four ten, radar contact lost."	5.4.6
Low altitude alert	Low altitude alert (Callsign). Check your altitude immediately. The (MVA/MIA/MSA) in your area is (altitude). "Low altitude alert, American seven. Check your altitude immediately. The MVA in your area is two thousand one hundred feet."	5.7.2
Traffic alert	Traffic alert (callsign). (position of traffic if time permits). Advise you turn (left/right, heading if appropriate) -and/or- climb/descend to (altitude) immediately. "Traffic alert, Air Canada two sixty, two o'clock. Advise you tun right heading zero six zero immediately."	5.7.2
Traffic point-out	(Callsign), traffic (direction) (distance) (direction) (type and livery) (altitude) (other instructions as needed). "United eight sixty, traffic 2 o'clock six miles opposite direction. A company heavy seven sixty-seven at five thousand."	5.7.2
Visual separation	(Callsign), maintain visual separation.	5.7.3
Termination of radar services	(Callsign), (airspace not online) radar services terminated, frequency change approved.	5.6.0

	"United forty-two, leaving my airspace, Seattle Center offline, radar services terminated, frequency change approved."	
Validate Mode C altitude	(Callsign), Say altitude/flight level. "American six, say altitude."	5.5.0
Altimeter issuance	(Callsign), (location if not destination airport) altimeter (altimeter) "SkyWest forty-two ten, Burbank altimeter two niner six eight."	5.8.0
Cross fix at altitude	(Callsign), cross (fix/vor (with bearing/distance if necessary) at (altitude) [issue altimeter if necessary] "FedEx seven ten heavy, cross ten DME north of the Vulcan VOR at flight level four zero."	5.10.1 & 6.3.0
Descend via arrival	(Callsign), descend via the (STAR name) (including the landing direction or runway transition as necessary and altimeter if necessary] "Brickyard thirty-nine fourteen, descend via the CAPPS2 arrival. Washington landing north. Washington altimeter two niner niner fife."	5.10.2
Vector off routing	(Callsign), depart (fix/vor) (heading) (altitude if necessary) "Southwest seventy-four, depart Westminster heading 130." "United two ten, depart CALVR heading tree six zero after CALVR descend and maintain 4,000" Cleared direct (fix) "Southwest sixteen, cleared direct RAVNN." (Turn right/left -or- fly heading) proceed direct (fix) when able "November two two six tango whiskey, turn left heading zero six zero direct PALEO when able."	5.10.3
Speed information request	(Callsign), say (airspeed/mach number) "UPS eight ten heavy, say mach number"	5.12.1
Speed adjustment	Maintain present speed Maintain (speed) knots "UPS eight ten heavy, maintain two eight zero knots." Maintain (speed) knots or greater "UPS eight ten heavy, maintain two eight zero knots or greater." Do not exceed (speed) knots "UPS eight ten heavy, do not exceed two niner zero knots."	5.12.3.2- 5.12.4.3.1

	Maintain maximum forward speed Maintain slowest practical speed (Increase/reduce) speed to (speed (followed by knots) or mach number) "UPS eight ten, decrease speed to two fife zero knots." "UPS eight ten, increase speed to mach zero point seven niner."	
Mach transition speed adjustment	Maintain (speed/mach #) transition to (mach #/speed) "UPS eight ten heavy, maintain 280 knots, transition to mach 0.72" "UPS eight ten heavy, maintain mach 0.72, transition to 280 knots"	5.12.5
Terminate speed restriction: **On a chart:**	Resume normal speed "American sixty-four, resume normal speed." Delete speed restrictions "American sixty-four, delete speed restrictions"	5.12.4.4
Simultaneous descent and speed restriction	Descend and maintain (altitude) then reduce speed to ((speed) knots/mach number) "Horizon Air twenty-two eighteen, descend and maintain four thousand then reduce speed to one seven zero knots." Reduce speed to ((speed) knots/mach number) then descend and maintain (altitude) "Horizon Air twenty-two eighteen, reduce speed to one niner zero knots then descend and maintain tree thousand."	5.12.6
Visual Approach: **Traffic to follow:**	(Airport) is (clock direction) (distance), report in sight "November six two tree mike mike, Executive airport is one o'clock six miles, report in sight" Cleared visual approach (runway) "November six two tree mike mike, cleared visual approach runway eight." Traffic to follow is (direction) (distance) (type, including livery) (altitude) (other necessary information) report in sight. "Delta sixty two, traffic is twelve o'clock seven miles, a heavy Airbus 330 at four thousand. Report in sight . . . [After aircraft reported in sight]. Maintain visual separation from that aircraft, cleared visual approach runway six following that aircraft."	5.13.1
Side Step:	"Cleared (approach). Side-step to runway (runway) "Cleared I-L-S runway one niner center approach, side-step to runway one niner-left".	

Instrument approach	(Callsign) is (position with distance, if non-RNAV or given being given a heading) (turn if one is required) (altitude) (clearance) "Lufthansa Eight super is six miles from BEEZY, fly heading one six zero, maintain 4,000 until established on the localizer. Cleared I-L-S runway one niner center approach." (Callsign) cleared direct (fix), cross fix (at/above/below altitude), cleared (approach). "Lufthsana eight super, cleared direct MOSBY cross MOSBY at or above 3,000, cleared RNAV GPS Y runway one niner center." "Sky tree two delta, fife miles from Westminster, maintain 2,500 until established on the final approach course, cleared VOR/DME-alpha approach".	5.13.1.2-13.3.5
Cancel approach clearance	(callsign), cancel approach clearance (instructions as needed) "American six, cancel approach clearance, fly heading one eight zero, maintain 3,000"	5.13.4
Uncontrolled field departure release	(Callsign) hold for release, advise number one for departure. Frequency change approved. "November four two golf golf, hold for release. Advise number one for departure. Frequency change approved" (Callsign) released for departure (time). Clearance void if not off by (time). Advise (facility) no later than (time) of intentions. (any other necessary information). Frequency change approved. "November four two golf golf, released for departure time two two one eight zulu. Clearance void If not off by two two one fife zulu. Advise Philadelphia Approach of intentions no later than two two two zero zulu. Frequency change approved.	5.3.2-5.3.4
Uncontrolled field approach clearance addendum	(Callsign) (traffic information) observed between you and the airport. Report IFR cancellation or missed approach this frequency. Frequency change approved. "November two two yankee Juliet, no traffic observed between you and the airport. Report IFR cancellation or missed approach this frequency. Frequency change approved."	5.3.0
Pop-up IFR	(Callsign), are you able to maintain your own terrain and obstacle clearance until reaching (MVA/MIA/MOCA/OROCA/MEA altitude)? (Callsign) cleared to (clearance limit) via (routing) (altitude if necessary) (beacon code if not previously assigned to establish radar contact) (ensure aircraft are able to maintain their own terrain and obstruction clearance if necessary).	5.3.1

	"November six two two yankee Juliet, are you able to maintain your own terrain and obstacle clearance until reaching 2,200 feet . . . [Pilot responds in the affirmative] . . . November six two two yankee Juliet, cleared to the Morristown Airport, via fly heading two zero zero, direct Coyly when able.	
Holding instructions: **As published:**	Cleared to (holding fix). Hold (direction) of (navaid including specified radial/fix) (leg direction in length [in time or distance] if necessary). (other instructions as needed). Expect further clearance (time). Time now (zulu time to nearest quarter minute). "Gulfstream six alpha bravo, cleared to Vulcan VOR. Hold east of the zero niner zero radial outbound, right hand turns one zero mile legs. Expect further clearance two zero zero zulu. Time now two one fife eight and a quarter." Cleared to (published holding fix). Hold (direction) as published. Expect further clearance at (time). Time is now (zulu time to nearest quarter minute) "Cleared direct CPLAN. Hold norrth as published. Expect further clearance at two two zero zero zulu. Time now two one fife six and tree quarters zulu."	5.15.1
Cancel holding instructions	Cleared to (clearance limit) via (instructions to get on route or 'last routing cleared'). "American six, cleared to the Dallas-Fort Worth airport via last routing cleared."	5.15.2
Practice approach	(Callsign), maintain VFR, practice approach approved [if no separation services are to be provided include: No separation services provided]. "November one eight six foxtrot, maintain VFR, practice approach approved. No separation services provided.	514.0
Altitude change	Climb/descend and maintain (altitude) "America One, climb and maintain flight level tree eight zero."	5.0.0, 5.9.0, 6.3.0
Flight following	(Callsign), monitor this frequency for traffic advisories. "Helicopter six two six hotel zulu, monitor this frequency for traffic advisories."	6.4.0
VFR-on-Top	Climb to and report reaching VFR-on-top [include either no tops reported or tops reported at (altitude)]. If not on top at (altitude), maintain (altitude) and advise. "Gulfstream six two victor victor, climb to and report reaching VFR-on-top. Tops reported at flight level four fife zero. If not on top by one two thousand fife hundred, maintain one two thousand fife hundred and advise"	6.4.0

4. Instructor Appointments

This is in the VATUSA Order 3120.311.

5. Training Staff Job Descriptions

Training Director (VATUSA3)

- Oversees all VATUSA training staff and materials
- Leads the VATUSA Training Department
- Approves Instructor candidates
- Approves appointment of sub-division Training Administrators
- Serves as a VATUSA Instructor
- Administers Over-the-Shoulder examinations
- Serves as a point of contact for Training Administrators

Training Deputy Director (VATUSA13)

- Implements training quality assurance standards division-wide
- Oversees sub-division quality assurance compliance
- Approves Instructor candidates
- Serves as a VATUSA Instructor
- Administers Over-the-Shoulder examinations
- Serves in place of VATUSA3 as necessary

Training Administrator

- Leads a sub-division Training Department
- Recommends Instructor candidates to VATUSA
- May appoint a staff of mentors to assist in training
- Creates and approves training materials (TWRTrainer and Euroscope files, Training SOPs, etc.)
- Administers Over-the-Shoulder examinations for their sub-division
- Responsible for all ratings and certifications awarded within their sub-division
- Serves as a VATUSA Instructor
- Reports to the VATUSA Training Department staff and respectively Air Traffic Manager

Instructor

- Serves as a VATUSA Instructor
- May create training materials
- Administers Over-the-Shoulder examinations for their sub-division
- Reports to the Training Administrator

Mentor

- A sub-division training staff member who may conduct sweatbox or live network training to controllers within the sub-division (including transferring or visiting)
- May create training materials
- Level of which they may train up to is controlled by the sub-division Training Administrator
- Reports to the sub-division Training Administrator

APPENDIX A. Training Standards (Satisfactory Competency only)

Delivery/Ground:

DID:	GRP:	CBT:	7110.65 Citation:	Domain:	Satisfactory:
1.0.0	II A 2	TBD	NONE	Introduction to VATSIM	NONE
1.1.0	II A 2	TBD	NONE	>Discussion of FAA 7110.65	NONE
1.2.0	II A 2	TBD	2-1-2 & 2-1-3	>Duty & Priority of ATC	Demonstrates understanding of ATC's roles in providing the safe and expeditious flow of traffic
1.3.0	II A 2	TBD	Chap 1	Introduction to ATC:	NONE
1.3.1	II A 2	TBD	2-4-22	>National Airspace System	Identifies all airspace classes
1.3.2.1	II A 2	TBD	2-4-22	>>Class G/E Airspace	Demonstrates knowledge of being at non-towered fields for E. Government Free airspace for G
1.3.2.2	II A 2	TBD	2-4-22	>>Class D Airspace	Demonstrates knowledge of class D being at towered fields.
1.3.2.3	II A 2	TBD	2-4-22	>>Class C Airspace (including TRSA)	Identifies floor/ceiling of class C airspace and requirements to operate within.
1.3.2.4	II A 2	TBD	2-4-22	>>Class B Airspace	Identifies floor/ceiling for a class B airspace and requirements to operate within. Shows how B and C differ.
1.3.2.4a	II A 2	TBD	2-4-22	>>>Mode C Veil	Explains that Mode C must always be operated on VATSIM in the air. (ASDE-X compliance facility specific)

1.3.3	II A 2	TBD	7-1-1	>>Class A Airspace	Identifies requirements to be in Class A airspace along with the floor and ceiling thereof
1.3.4.0	II A 2	TBD	2-4-22	>>Special Use Airspace	Identifies three types of SUAs.
1.3.4.1	II A 2	TBD	2-4-22	>>>Warning Areas	
1.3.4.2	II A 2	TBD	2-4-22	>>>Restricted Areas	
1.3.4.3	II A 2	TBD	2-4-22	>>>Prohibited Areas	
1.4.0	II A 2	TBD	2-4-22	>Weather	
1.4.1.1	II A 2	TBD	2-6	>>METAR	Can fully decode a METAR including: Station identification, Time observation was made, Wind (including variable, gusts), Altimeter setting, Temperature & Dewpoint (and explains relationship), Identified cloud types and when a ceiling is present
1.4.1.2	II A 2	TBD	2-6	>>Terminal Aerodrome Forecast	Can fully decode a TAF including: Period of validity, When forecast was made, From period including forecasted conditions
1.4.1.3	II A 2	TBD	4-5-4	>>Lowest Usable Flight Level	Adequately lists the flight level that is useable at given altimeter settings
1.5.1.1	II A 5	TBD	2-4-8 & 3-1-13	>Radio Telephony	NONE
1.5.1.2	II A 5	TBD	2-4-8 & 3-1-13	>>Two-way radio communication	Properly establish and communicate two-way radio communication
1.5.1.3	II A 5 & 6	TBD	2-4-16	>>NATO Phonetic	Can pronounce letters in accordance with NATO phonetic alphabet

1.5.1.4	II A 5 & 6	TBD	2-4-17	>>Number Groupings	Can pronounce zero to niner Properly groups numbers as appropriate
1.5.1.5	II A 5	TBD	2-3-9	>>Special Callsigns	Can identify Branch of Service callsigns by designation/name for at least three services
1.6	A1.1	TBD	VATSIM	Setting up VRC	Can connect to VRC on an active position (sweatbox) and set up frequency and vox room/server
2.0.0	II C 1	TBD	2-5	Flight Data Theory	Can explain the parts of a flight plan
2.1.0	II C 1	TBD	2-3-1	>Route of flight	Issues clearances using prescribed phraseology
2.1.1	II C 1	TBD	4-5-2	>>Proper altitude for direction of flight	Identifies flight plan altitudes which do not correspond with NEODD/SWEVEN
2.1.2	II C 1	TBD	2-1-28	>>Reduced Vertical Separation Minima	Identifies when RVSM begins explains how it differs from non-RVSM and properly amends non-compliant flight plans.
2.1.3	II C 3	TBD	4-2-5	>>Amendments	Processes amendments to flight plan Identifies errors in flight plans and corrects them
2.2.0	II A 4	TBD	2-1-18	>Operational Requests	Complies with reasonable requests as workload permits
2.3.0	II A 7	TBD	2-3-8	>Equipment Suffix	Identifies, compares and contrasts at minimal the differences between VOR and aRea NAVigation Ensures flight plans are in compliance with restrictions

					regarding navigation type by identifying /A, /G and /L
2.4.1	II A 2	TBD	Chap 7	>VFR	Explains what VFR is
2.4.2	II A 2	TBD	7-1	>>Class E/D	Issues VFR code*
2.4.3.	II A 2	TBD	7-8	>>Class C	Issues discrete beacon code
2.4.4	II A 2	TBD	7-9	>>Class B	Issues VFR B clearance including discrete beacon code
2.4.5	II A 2	TBD	2-1-21	>>Flight Following	*Issues discrete code if requests flight following
2.5.1	II C 3	TBD	3-9-1	>Departure Procedures	Identifies four types of SIDs Defines pilot nav, radar nav and hybrid nav SIDs
2.5.1.1	II C 3	TBD	3-9-1	>>Pilot nav	
2.5.1.2	II C 3	TBD	3-9-1	>>Radar nav	
2.5.1.3	II C 3	TBD	3-9-1	>>Hybrid nav	
2.5.1.4	II C 3	TBD	3-9-1	>>ODP/Special Take-off minimums	
2.5.1.5	II C 3		3-9-1	>Different crossing restriction than stated on DP	Issues clearance with a crossing restriction different than that on the DP
2.6.1	II C 3	TBD	4-2-3	Clearance Issuance	Issues clearance using prescribed phraseology according to the SID (if any)
2.6.1.1	II C 3	TBD	2-1-17	>Coordination	Coordinates flight plan changes with other facilities including proper usage of scratchpads
2.6.1.2	II C 3	TBD	8-2-2	>Transfer of communication	Transfers communication using prescribed phraseology
2.7.1	II C 3	TBD	2-1-18	Operational Requests	Ensures operational requests are understood and acknowledged
2.7.1.1	II B 1	TBD	APP A(6)	>Position Briefing	Properly briefs relieving controller on necessary information

2.8.0	II A 5	TBD	2-4-3	Ensure proper readback	Ensures readback is correct with prescribed phraseology Informs pilot of ATIS if they do not call in with it along with runway and altimeter setting as needed
2,101	ADV	TBD	4-2-6	Through-clearance	NONE
3.0.0	II A 2	TBD	3-7-2	Airport Layout	Defines movement and non-movement areas
3.0.1	II A 2	TBD	3-7-2	>Movement Areas	Gives example of a movement area
3.0.2	II A 2	TBD	3-7-2	>Non-movement areas	Gives example of a non-movement area
3.1.0	II A 2	TBD	3-7-2	Fixed-wing ground movement	Issues taxi instructions to an active runway utilizing prescribed phraseology
3.1.1	II A 2	TBD	3-7-2	>Taxi to runway	
3.1.1.1	II A 2	TBD	3-7-2	>>Hold short	Issues holding short instructions via prescribed phraseology
3.1.1.2	II A 2	TBD	3-7-2	>>Intersection departure	Issues taxi to a runway for an intersection departure using prescribed phraseology
3.1.2	II A 2	TBD	3-7-2	>Taxi to gate	Issues taxi instructions to the gate via prescribed phraseology
3.1.3	II A 2	TBD	3-7-2	>Progressive taxi	Issues progressive taxi in a professional manner utilizing prescribed phraseology
3.2.0	II D 1	TBD	3-11-1	Helicopter ground movement	Identifies and defines the three movement types
3.2.1	II D 1	TBD	3-11-1	>Surface taxi	
3.2.2	II D 1	TBD	3-11-1	>Hover taxi	
3.2.3	II D 1	TBD	3-11-1	>Air taxi	

3.4.0	II D 1	TBD	3-7-2	Ground Sequencing	Sequences ground traffic
3.4.1	II D 1	TBD	3-7-2	>Follow	Properly utilizes "follow" in a taxi instruction.
3.4.2	II D 1	TBD	3-7-2	>Give way	Properly utilizes "give way" in a taxi instruction.
3.5.0	II B I	TBD	3-1-4	Coordination (Including runway crossing and other necessary information)	Coordinates with other ATC positions using prescribed phraseology
3.6.0	II A 3	TBD	3-7-2	Expeditious compliance	Utilizes "no delay" and "expediate" as needed
3.7.0	II A 4	TBD	3-7-2 & 2-1-4	Abnormalities	Adequately modifies flow of traffic due to emergencies or other situations
3.8.0	II A 2	TBD	2-1-19	Aircraft categories and classes	Explains special significance of heavy/super

S2:

DID:	**GRP:**	**CBT:**	**7110.65 Citation:**	**Domain:**	**Satisfactory:**
4.0.0	II A 2	TBD	Chap 3	Introduction to Local Control	Can explain role of local controller
4.1.1	II E 1	TBD	3-1-3	Selection of Active Runway	Gives criteria for selection of active runway and identifies active runway currently in use
4.1.2	II E 2	TBD	3-9-3	ATIS Issuance & Content	Lists the portions of an ATIS
4.2.0	II E 8	TBD		VFR	Identifies all segments of the VFR traffic pattern

4.2.1	II E 8	TBD	3-10-1	>Traffic Pattern	
4.2.2	II E 8	TBD	3-10-1	>>Upwind	
4.2.3	II E 8	TBD	3-10-1	>>Crosswind	
4.2.4	II E 8	TBD	3-10-1	>>Downwind	
4.2.5	II E 8	TBD	3-10-1	>>Base	
4.2.6	II E 8	TBD	3-10-1	>>Entry Instructions	Identifies and utilizes prescribed phraseology to issue entries into the pattern.
4.2.7	II E 8	TBD	3-8-1	>>Sequencing	Identifies sequencing methodology
4.2.7.1	II E 8	TBD	3-8-1	>>> S-Turns	
4.2.7.2	II E 8	TBD	3-8-1	>>>270/360s	
4.2.7.3	II E 8	TBD	3-8-1	>>>Follow	
4.2.7.4	II E 8	TBD	3-8-1	>>>Visual Holding	
4.2.8	II E 8	TBD	3-8-1	>>Transitioning	NONE
4.3.0	II E 8	TBD	3-8-1	>Option	Defines each area in the option and uses prescribed phraseology to only approve parts of the option
4.3.1	II E 8	TBD	3-8-1	>>Low approach	
4.3.2	II E 8	TBD	3-8-1	>>Touch-and-go	
4.3.3	II E 8	TBD	3-8-1	>>Stop-and-go	
4.4.0	II E 8	TBD	3-8-1	>Flight-following	Ensures VFR aircraft are properly radar identified and informed of traffic
4.5.0	II E 4	TBD	3-8-1	Take-off Clearance	Issues take-off clearance with prescribed phraseology

4.5.1	II E 4	TBD	3-9-4	>Line-up and Wait	Lists criteria for LUAW and utilizes prescribed phraseology (including informing pilot of reason for LUAW if reason is not immediately apparent)
4.5.2	II E 4	TBD	3-9-10	>Intersection Departure	
4.5.3	II E 4	TBD	3-9-11	>Cancellation of Take-off Clearance	Uses prescribed phraseology to cancel a take-off
4.5.4	II E 4	TBD	3-10-1	>Traffic Pattern Take-off	Uses prescribed phraseology and pattern direction
4.5.5	II E 4	TBD	3-11-2	>Helicopter takeoff	Uses prescribed phraseology for helicopter departures from non-runway areas
4.6.0	II E 5	TBD	3-10-1	Landing Clearance	Issues landing clearance (including advisories) using prescribed phraseology
4.6.1	II E 5	TBD	3-10-7	>Crossing Runways	(Part of landing clearance)
4.6.2	II E 5	TBD	3-10-4	>LAHSO	Defines land and hold short operations and utilizes prescribed phraseology to issue one
4.6.3	II E 3	TBD	3-8-1	>Go-Arounds	Issues go-around only when necessary using prescribed phraseology

4.6.4	II E 5	TBD	4-8-7	>Side-Step	Uses prescribed phraseology
4.6.5	II E 5	TBD	4-8-6	>Circle-to-land	Uses prescribed phraseology
4.7.0	II E 6	TBD	3-9-6	Same runway Separation	Demonstrates basic understanding of same runway separation
4.8.0	II E 6	TBD	3-9-8	Wake Turbulence Separation	Defines when wake turbulence is applicable
4.9.0	II E 9	TBD	2-1-15 & 2-1-17	Transfer of control	Transfer aircraft in an expeditious manner to the proper departure controller
4.9.1	II E 9	TBD	2-1-15	>Issues rolling calls to departure	Issues rolling calls as necessary
4.100.1	III E 5	TBD	4-10-12	Overhead Maneuver	NONE

S3:

DID:	**GRP:**	**CBT:**	**7110.65 Citation:**	**Domain:**	**Satisfactory:**
5.0.0	III B 1	TBD	Chap 5	Introduction to Radar Control/TRACON	Demonstrates knowledge of radar control
5.0.1	III B I	TBD	Chap 5	>SID/STAR/approach symbology	Explains the symbology and meaning on departures, arrival, and approach charts/plates

5.1.0	II A 2	TBD	2-1-17	Coordination	Utilizes coordination as necessary
5.1.1	III B 1	TBD	5-4-5	>Hand-offs	Hands off traffic before entering another controller's airspace
5.1.1.1	III B 1	TBD	5-4-5	>>Automated	NONE
5.1.1.2	III B 1	TBD	5-4-5	>>Manual	NONE
5.1.2	III B 1	TBD	5-4-7	>Point-outs	Utilizes prescribed phraseology for a point-out
5.1.3	III B 1	TBD	5-4-10	>Pre-arranged coordination	Demonstrates understanding of pre-arranged coordination
5.1.4	III B 1	TBD	2-4-12	>APREQ	Receives approval requests for changes to aircraft heading/direct or altitude using prescribed phraseology
5.2.0	III B 1	TBD	4-3-3	Amendments	Amends flight plan properly for changes in altitude and flight plan route
5.3.0	III G 1 & 5	TBD	4-3-4	Uncontrolled field operations	Can explain one-in/one-out rule
5.3.1	III G 1 & 5	TBD	4-2-8	>Pop-up IFR & Flight Following	Properly clears pop-up IFR traffic using prescribed phraseology Establishes aircraft on flight following using prescribed phraseology

5.3.2	III G 1	TBD	4-3-4	>Release	Issues a clearance followed by a proper release request or hold for release using prescribed phraseology.
5.3.3	III G 3	TBD	4-3-4	>One in/One out	Ensures one IFR aircraft is inbound/outbound for an airport
5.3.4	III D 1	TBD	4-3-4	>Handling arrivals	Ensures arriving IFR aircraft are informed of any traffic in vicinity using prescribed phraseology
5.3.5	III D 7	TBD	5-4-3	>Transfer	Transfers aircraft to other facility using prescribed phraseology and initiates the radar hand-off in a timely fashion. Ensures aircraft do not impermissibly bust another controller's airspace
5.4.0	III C I	TBD	5-3-2 & 5-3-3	Radar Identification	Identifies all identification primary and secondary identification techniques
5.4.1	III C I	TBD	5-3-3	>IDENT	
5.4.2	III C I	TBD	5-3-3	>Change squawk code	

5.4.3	III C I	TBD	5-3-3	>Squawk standby/normal	
5.4.4	III C I	TBD	5-3-2	>Right/left for radar identification	
5.4.5	III C I	TBD	5-3-2	>Position reports	Radar identifies aircraft when controller can ascertain where aircraft is via position report
5.4.6	III C 1	TBD	5-10-5	>Radar contact lost	Uses prescribed phraseology to inform an aircraft of loss of radar contact
5.4.7	III C I	TBD	5-3-2	>Rolling calls	Explains what a rolling call is and gives an example
5.4.8	III C I	TBD	5-3-6	>Position confirmation	Confirms pilot location using prescribed phraseology
5.5.0	III E I	TBD	5-2-17	Verify Mode C altitude	Verifies mode C altitude when aircraft enters from another facility
5.6.0	III C I	TBD	5-1-13	Radar Termination	Terminates radar services using prescribed phraseology when necessary
5.7.0	III F 1 & 2	TBD	5-1 & 5-5	Separation	Identifies vertical and horizonal separation in airspace classes
5.7.1	III F 1 & 2	TBD	5-1-8 & 5-5-2	>Merging targets	Demonstrates understanding of merging targets
5.7.2	III F 1 & 2	TBD	2-1-21	>Traffic calls and alerts	Issues traffic calls and alerts using prescribed phraseology

5.7.3	III F 1 & 2	TBD	2-1-21	>Visual	Applies visual separation and does not use it to absolve controller of positive separation requirements
5.7.4	III F 1 & 2	TBD	5-5	>Positive	Demonstrates knowledge of positive separation
5.7.5	III F 1 & 2	TBD	5-5-4	>Wake turbulence	Applies wake turbulence minima in the approach airspace
5.8.0	III G 1	TBD	2-7-2	Altimeter Issuance	Issue altimeter when aircraft will be descending below the lowest usable flight level or when below such every fifty flying miles identifying source of altimeter
5.9.0	III C 3	TBD	5-8-1	Climb-out	Issues climbing instructions utilizing prescribed phraseology as appropriate
5.10.0	III D 3	TBD	4-5-7	STAR	Utilizes prescribed phraseology for STARs including ATIS/altimeter issuance when necessary
5.10.1	III D 3	TBD	4-5-7	>Crossing restrictions	

5.10.2	III D 3	TBD	4-5-7	>Descend via	
5.10.3	III D 2	TBD	4-5-7	>Vectoring off	When needed issues hard altitude for aircraft being vectored off of a STAR
5.11.0	III E 2	TBD	5-6-1	Vectoring	Gives reason for vector
5.11.1	III E 2	TBD	2-1-6	>Low altitude alert	NONE
5.11.2	III E 2	TBD	5-6-1	>Minimal Vectoring Altitude	Defines and follows the MVA
5,12	III E 1	TBD	5-7 & 5-9	Sequencing and spacing	Efficiently sequences and separates aircraft
5.12.1	III E 5	TBD	5-7-1 to 5-7-3	>Speed adjustment	Utilizes proper speed phraseology as required in the sub-domains
5.12.2.1	III E 5	TBD	5-7-2	>>Speed limits	States prescribed limits for speed in reference to airport/aircraft type IOW 7110.65 5-7-3
5.12.3.2	III E 5	TBD	5-7-2	>>Speed adjustment	Uses prescribed phraseology to issue a speed adjustment
5.12.4.3	III E 5	TBD	5-7-2	>>>Increase speed	
5.12.4.3.1	III E 5	TBD	5-7-2	>>>Maintain speed	
5.12.4.3.2	III E 5	TBD	5-7-2	>>>Decrease speed	
5.12.4.4	III E 5	TBD	5-7-4	>>Terminal of speed restriction	Utilizes prescribed phraseology to terminate speed restrictions
5.12.5	III E 5	TBD	5-7-2	>>Mach transition	States where the Mach transition is and issues utilizing prescribed phraseology transition speeds
5.12.6	III E 5	TBD	5-7-2	>Altitude + Speed adjustment	Issues one of altitude or speed adjustment to do first then which to do second
5.13	III D 6	TBD	4-8-1	Approaches	Defines precision vs. non-precision approach
5.13.1.1	III D 6	TBD	4-8-1	>Visual	NONE
5.13.1.2	III D 6	TBD	4-8-1	>Instrument/Charted	NONE
5.13.1.	III D 6	TBD	4-8-1	>>Precision	NONE
5.13.2.2	III D 6	TBD	4-8-1	>>>ILS/GLS	Gives approach clearance utilizing prescribed phraseology

5.13.3	III D 6	TBD	4-8-1	>>Non-precision	Covered by 5.13.3.1-.4
5.13.3.1	III D 6	TBD	4-8-1	>>>VOR/DME	Gives approach clearance utilizing prescribed phraseology
5.13.3.2	III D 6	TBD	4-8-1	>>>LOC/LDA	Gives approach clearance utilizing prescribed phraseology
5.13.3.3	III D 6	TBD	4-8-1	>>>NDB	Gives approach clearance utilizing prescribed phraseology
5.13.3.4	III D 6	TBD	4-8-1	>>>RNAV (RNP/GPS)	Gives approach clearance utilizing prescribed phraseology
5.13.3.5	III D 6	TBD	4-8-1	>>>Charted Visual	Gives approach clearance utilizing prescribed phraseology
5.13.4	III D 6	TBD	4-8-1	>Cancel	Cancels approach clearance using prescribed phraseology
5.13.5	III D 7	TBD	5-9-4	>Transfer to tower	Hands aircraft off to tower in an adequate time/distance from airport
5.13.0	III G 2	TBD	3-8-1	Sequencing	Sequences aircraft in a manner that maintains positive separation.
5.14.0	III G 2	TBD	4-8-11	>Practice Approach	Uses prescribed phraseology for practice approaches
5.15.0	III G 4	TBD	4-6-1	Holds	Discusses difference between published and non-published holds
5.15.1	III G 4	TBD	4-6-4	>Instructions	Uses prescribed phraseology for issuing holding instructions
5.14.2	III G 4	TBD	4-6-2	>Cancel	Clears aircraft after a hold and uses prescribed phraseology

C1:

D I D :	GRP:	CBT:	7110.65 Citation:	Domain:	Satisfactory:
6.0.0	IV A 2	500.100	Chapter 5	Introduction to En-Route	Demonstrates knowledge of the en-route environment
6.1.0	IV B 1	TBD	2-1-17	Coordination	Coordinates with other facilities
6.2.0	IV C-E	TBD	5-5-4	En-route Separation	Ensures en-route separation is maintained
6.3.0	IV C 1	TBD	4-5-7	Altitude Changes	Issues descents as necessary utilizing prescribed phraseology
6.3.1	IV C 1	TBD	4-5-7	>Crossing Restrictions	Issues descent instructions to cross/meet an altitude as necessary using prescribed phraseology
6.3.2	IV E 5	TBD		>Basic Descent Math	Issues descents to an aircraft when necessary to ensure the aircraft should in an ideal environment meet the initial crossing restriction assigned
6.4.0	IV D 6	TBD	7-3-1	VFR-on-Top and Flight Following	Issues VFR on-top utilizing prescribed phraseology. Provides flight following services when able.
6.5.0	IV E 1	TBD	2-6-2	Hazard Weather Issuance	Issues hazardous weather information
6.6.0	IV D 1	TBD	P-2	Positive Control	Ensures positive control is maintained

6.7.0	IV D 1	TBD	2-1-21	Crossing traffic	Utilizes prescribed phraseology to alert crossing traffic of each other
6.8.0	IV B 1 & E 4	TBD	2-1-15	Transfers	Uses prescribed phraseology for crossing traffic
6.8.1	IV B 1	TBD	2-1-15	>Outside controlled	Establishes radar services in accordance with proper radar identification methodology
6.8.2	IV B 1	TBD	2-1-15	>Leaving controlled	Terminates radar services when necessary using prescribed phraseology
6.8.3	IV B 1	TBD	2-1-15	>To another controller	Transfers radar and voice hand-off in an adequate time using prescribed phraseology
6,101	ADV	TBD	Chap 6	Non-Radar	
6,102	ADV	TBD	Chap 8	Oceanic	
6,103	ADV	TBD	2-1-11	Military	NONE
6.103.1	ADV	TBD	9-2-14	>In-air re-fueling	NONE
6.103.2	ADV	TBD	2-1-11	>MARSA	NONE
6.103.3	ADV	TBD	4-5-7	>Cruise Clearance	NONE

APPENDIX B. Training Milestone Map

---WIP--- (Expect out within three months of publication)

APPENDIX C. 3120.25A (for Delivery/Ground Certification)

I certify that via observations of the student/developmental (name (cid)) controller's training meets the required standards for Delivery/Ground certification as outlined in VATUSA Job Order 3120.4 (and alphabetical revisions thereof).

Signature *date*

APPENDIX D. 3120.25B (for S2 Rating)

VATUSA COMPETENCY REVIEW AND CERTIFICATION						
Student Name & CID:	Operation Position:	Facility:				
Review date:						
Please make comments at the end of this form						
Performance Category:	Performance Indicator:	NOT OBSERVED	COMMENDABLE	SATISFACTOR	UNSATISFACTORY
A. Theory	1. Demonstrates knowledge of Delivery and Ground Controller duties and responsibilities				
	a. Defines all parts of a clearance				
	b. Explains all types of SIDs				
	c. Defines what RVSM is and how it differs from normal direction of flight altitude rules				
	d. Defines all parts of a flight plan				
	e. Defines, compares and contrasts: /A, /G, /L and /Z equipment suffixes				
	2. Demonstrates knowledge of Local Controller duties and responsibilities				
	a. Identifies difference between movement and non-movement areas				
	b. Defines all parts of VFR traffic pattern				
B. Practical	1. Identifies runway in use given the weather and SOP				
	a. Properly decodes METAR and TAF				
	b. Identifies landing and departing runway				
	2. Clearance issuance				
	a. At least 90% of IFR clearances contain no errors*				
	b. At least 90% of VFR clearances contain no errors*				

	c. Readback and hear back is assured				
	3. Ground movement				
	a. Arriving aircraft are taxied to requested destination IAW the standard				
	b. Departing aircraft are taxied to their runway IAW the standard				
	c. No runway incursions occur				
	d. No multiple runway crossings are issued				
	e. Aircraft are squawking altitude encoding prior to take-off^				
	f. Proper sequencing is utilized including but not limited to departure sequencing, and proper give way/follow instructions				
	g. Helicopter ground movements are issued IAW the standard				
	4. Landing Clearances				
	a. No runway incursions occur				
	b. VFR aircraft are cleared for the option with or without limitations				
	c. Wake turbulence advisories are given as needed				
	d. Necessary traffic information is given as needed				
	e. Side-step clearances are properly given as needed				
	f. Go-around clearances are properly given as needed and coordinated as necessary				
	g. Landing clearances include wind information when necessary#				
	h. LAHSO is properly utilized¥				
	i. Helicopter departures at ramp and runway are handled				
	5. VFR in traffic pattern are adequately spaced				
	6. Take-off clearance				
	a. Line-up and wait is properly utilized IAW the standard				
	b. Intersection departures are conducted IAW the standard				
	c. Wake turbulence separation is adhered to				

C. Coordination	1. Ensures relief briefing was understood				
	2. Conducts relief briefing at end of exam properly				
	3. Properly coordinates runway crossings				
	4. Properly transfers control of aircraft when requires				
D. Professional Development	1. Communications are done in a professional manner				
	2. Only gives communications when necessary^				
	3. Effective working speed is maintained^				
	4. Manages frequency^				
Notes:					
Instructor name & CID:					
OTS RESULT: CERTIFICATION CONTINUATION OF OJT					

THIS FORM MUST BE FILED WITH VATUSA BEFORE SUBMITTING THE RATING UPGRADE VIA THE VATUSA WEBSITE.

Notes to instructors:

- Not Observed: Any item marked as “Not Observed” must be explicitly tested in an oral portion of the OTS if it is in Category A or C. No item in Category B may be marked as “Not Observed”, and items in Category D may be observed generally to meet a “Satisfactory” level.
- Commendable: Meeting the standard for the DID(s) associated with this area this may be marked as such.
- Satisfactory: Meeting the standard required by the DID(s) associated with that area.
- Needs Improvement: Meeting the standard in spirit but lacking in an adequate level of execution or depth. Continued performance at this level must not lead to a certification. Any results with a Needs Improvement (NI) must be discussed with the student and rectified before continuing on to their next level of training.

- Unsatisfactory: Fails to meet the standard associated with the DID(s) that test this area. Any area with an Unsatisfactory necessitate the student/developmental failing the OTS. Reasons for failure must be noted and discussed with the student/developmental.
- Mark CERTIFICATION is the student/developmental has had all marks of at least SATISFACTORY (unless a NEEDS IMPROVEMENT is permissible). Mark CONTINUATION OF OJT if the student/developmental has at least one UNSATISFACTORY mark.
- define an area where performance just below this level may be passed with a “NI”. You are to use your judgement and ensure the student/developmental corrects these deficiencies before moving forward in their training.
- ^ define a non-critical area where compliance is recommended but not required
- # defines an area where compliance can be exemplified without any unnecessary work by the instructor (i.e., a landing clearance can always include the wind, but it only needs to be necessary when military or tailwind component > 5 knots. An area with an # must be demonstrated by at worst asking the student when this is required).
- ¥ should the facility not be LAHSO capable, the student may meet this standard by discussing what LAHSO is and giving the phraseology for such.

APPENDIX E. 3120.25C (for S3 Rating)

VATUSA COMPETENCY REVIEW AND CERTIFICATION						
Instructor Name & CID:	Operation Position:	Facility:				
Review date:						
Please make comments on the third page of this form						
Performance Category:	Performance Indicator:	NOT OBSERVED	COMMENDABLE	SATISFACTOR	UNSATISFACTORY
E. Theory	1. Demonstrates knowledge of the radar controller with respect to the TRACON airspace				
	a. Explains IFR/VFR, IFR/IFR, and VFR/VFR separation minima in class B, C, and D airspace				
	b. States what the one-in/one-out rule is and where it is applicable				
	c. Defines what an MVA, MIA and MSA is.				
	2. Explains the various symbology on departure, arrival, and approach chart/plates				
	a. Identifies crossing restrictions				
	b. Identifies and defines IAF, MAP, and FAF				
	c. Explains the difference between precision and non-precision approaches				
	d. Holding fix and alternate holding fix identifies on one instrument approach plate				
B. Practical	1. Clears pop-up IFR aircraft without error				
	2. Clears IFR & VFR aircraft on the ground without error.				
	3. Establishes radar contact with aircraft using proper phraseology and technique (including vectoring at or above MVA)				

	4. Aircraft are separated and sequenced without loss of separation or airspace violations*				
	5. Positive control is maintained¥				
	6. Aircraft are given weather, altimeter and approach to expect as necessary				
	7. Traffic call-outs and traffic alerts are given using prescribed phraseology (including proper application of visual separation)				
	8. Approach clearances are given using proper phraseology				
	a. ILS approach				
	b. RNAV approach				
	c. Visual approach (charted visual#)				
	9. Departures are vectored onto departure routing as necessary				
	10. One-in/one-out rule is not violated				
	11. Holding clearances are issued with proper phraseology				
	12. Holding clearances are cancelled with proper phraseology				
	13. Airspace is effectively utilized and managed				
C. Coordination	1. Ensures relief briefing was understood				
	2. Conducts relief briefing at end of exam properly				
	3. Utilizes APREQ and point-outs properly				
	4. Properly transfers control of aircraft when required				
5. Professional Development	1. Communications are done in a professional manner				
	2. Only gives communications when necessary^				
	3. Effective working speed is maintained^				
	4. Manages frequency^				
Notes:					

Instructor name & CID: OTS RESULT: CERTIFICATION CONTINUATION OF OJT

Notes to instructors:

- Not Observed: Any item marked as “Not Observed” must be explicitly tested in an oral portion of the OTS if it is in Category A or C. No item in Category B may be marked as “Not Observed”, and items in Category D may be observed generally to meet a “Satisfactory” level.
- Commendable: Meeting the commendable standard for the DID(s) associated with this area this may be marked as such. Should a DID list NONE as the commendable, an instructor may award a commendable level of performance as they see fit.
- Satisfactory: Meeting the standard required by the DID(s) associated with that area.
- Needs Improvement: Meeting the standard in spirit but lacking in an adequate level of execution or depth. Continued performance at this level must not lead to a certification. An area where a student/developmental needs improvement may be marked as “SATISFACTORY” and a note made in the note box detailing where and how the student/developmental’s performance just missed the standard. Any results with a Needs Improvement (NI) must be discussed with the student and rectified before continuing on to their next level of training. Only one area may be marked as NEEDS IMPROVEMENT, any other area marked as such must result in no certification.
- Unsatisfactory: Fails to meet the standard associated with the DID(s) that test this area. Any area with an Unsatisfactory necessitate the student/developmental failing the OTS. Reasons for failure must be noted and discussed with the student/developmental.
- Mark CERTIFICATION is the student/developmental has had all marks of at least SATISFACTORY (unless a NEEDS IMPROVEMENT is permissible). Mark CONTINUATION OF OJT if the student/developmental has at least one UNSATISFACTORY mark.
- Student/developmental may commit at most one loss of separation or airspace violation to earn a SATISFACTORY. Instructors are cautioned to not charge an UNSATISFACTORY rating under this category if the error was due to a mistake made by the Instructor. If there were ample opportunity for the student/developmental to fix the problem, a NEEDS IMPROVEMENT may be awarded, and the student still passed. Details of what occurred must be noted in Notes area.
- ¥ Positive control is demonstrated by ensuring that any climb, descents, vectors, clearance or other control instructions do not place the separation of aircraft in doubt.
- # Charted visual approach if the facility has one, this may be demonstrated via a simple question of how this clearance would work
- ^ define a non-critical area where compliance is recommended but not required

APPENDIX F. 3120.25D (for C1 Rating)

VATUSA COMPETENCY REVIEW AND CERTIFICATION						
Instructor Name & CID:	Operation Position:	Facility:				
Review date:						
Please make comments on the third page of this form						
Performance Category:	Performance Indicator:	NOT OBSERVED	COMMENDABLE	SATISFACTOR	UNSATISFACTORY
14. Theory	1. Demonstrates knowledge of the radar controller with respect to the en-route airspace				
	d. Explains IFR/IFR separation minima in class A airspace (including super)				
	e. Provides hazardous weather example using proper phraseology				
B. Practical	1. Solicits PIREPs, ensuring proper readback/hearback				
	2. Establishes radar contact with aircraft using proper phraseology and technique (including vectoring at or above MIA)				
	3. Aircraft are separated and sequenced without loss of separation or airspace violations				
	4. Positive control is assured¥				
	5. Aircraft are given altimeter setting as necessary				
	6. Traffic call-outs, crossing traffic, low altitude alerts, and traffic alerts are given using prescribed phraseology (including proper application of visual separation outside of class A airspace)				
	7. Descents are given in a timely manner				
	8. Holding clearances are issued with proper phraseology				

	9. Holding clearances are cancelled with proper phraseology	[redacted]			
	10. Airspace is effectively utilized and managed	[redacted]			
	11. All clearances are given without error!	[redacted]			
5. Coordination	1. Ensures relief briefing was understood				
	2. Conducts relief briefing at end of exam properly				
	3. Utilizes APREQ and point-outs properly				
	4. Properly transfers control of aircraft when required				
5. Professional Development	1. Communications are done in a professional manner	[redacted]			
	2. Only gives communications when necessary^	[redacted]			[redacted]
	3. Effective working speed is maintained^	[redacted]			[redacted]
	4. Manages frequency^	[redacted]			[redacted]
Notes:					
Instructor name & CID: OTS RESULT: CERTIFICATION CONTINUATION OF OJT					

Notes to instructors:

- Not Observed: Any item marked as “Not Observed” must be explicitly tested in an oral portion of the OTS if it is in Category A or C. No item in Category B may be marked as “Not Observed”, and items in Category D may be observed generally to meet a “Satisfactory” level.
- Commendable: Meeting the commendable standard for the DID(s) associated with this area this may be marked as such. Should a DID list NONE as the commendable, an instructor may award a commendable level of performance as they see fit.
- Satisfactory: Meeting the standard required by the DID(s) associated with that area.
- Needs Improvement: For a C1 Controller no areas may be marked “Needs Improvement” to be issued a certification.

- Unsatisfactory: Fails to meet the standard associated with the DID(s) that test this area. Any area with an Unsatisfactory necessitate the student/developmental failing the OTS. Reasons for failure must be noted and discussed with the student/developmental.
- Mark CERTIFICATION is the student/developmental has had all marks of at least SATISFACTORY (unless a NEEDS IMPROVEMENT is permissible). Mark CONTINUATION OF OJT if the student/developmental has at least one UNSATISFACTORY mark.
- ¥ Positive control is demonstrated by ensuring that any climb, descents, vectors, clearance or other control instructions do not place the separation of aircraft in doubt.
- ! This includes IFR clearances and approach clearances
- ^ define a non-critical area where compliance is recommended but not required